

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012516**Date Inspected:** 08-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

6CE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 174 located at SSD27-PP045 on the cross beam side of segment. Welder is identified as Mr. Dai Lu (048659). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and WR10784 repair procedure.

Shield Metal Arc Welding (SMAW) VT repair welding was performed on longitudinal diaphragm between panel points 45 & 46 at the bike path side of segment. Welder is identified as Mr. Zang Wei (066413). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-Repair-1.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 171 located at SSD27-PP045 on the cross beam side of segment. Welder is identified as Mr. Dai Lu (048659). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-

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SMAW-4G (4F)-FCM-Repair-1 and WR10763 repair procedure.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 048 located at SSD27-PP045 on the cross beam side of segment. Welder is identified as Mr. Dai Lu (048659). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and WR10764 repair procedure.

6AW

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 006 located at OBW6F on the counter weight side of segment. Welder is identified as Mr. Han Xiaofeng (054467). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and WR10762 repair procedure.

Y Location of repairs areas by above noted welder (054467) is located at 800mm, 950mm and 2870mm.

6CW

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 128 located at FB031-001 on the cross beam side of segment. Welder is identified as Mr. Han Xiaofeng (054467). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and CWR1248 repair procedure.

7CW+7BW

Shield Metal Arc Welding (SMAW) welding was performed on weld joints 13 and 14 located at EP058-001 on the counter weight of segment. Welder is identified as Mr. Zang Yanbo (045196). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2211-B-U2-FCM-1.

NDT Observation

This QA Inspector observed ZPMC Ultra Sonic Testing (UT) Technician performed UT on various locations in the trial assembly yard. Locations are as followed:

6CW+6BW

1. 1 Bottom plate stiffeners web splice per Punch list item 394 closest to counter weight side of segment.

This QA Inspector observed ZPMC Magnetic Particle Testing (MT) Technician performed MT on various locations in the trial assembly yard. Locations are as followed:

6CE

1. Side plate temporary attachment locations located at panel point 47 the cross beam side of segment.

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6BE

1. Weld joint SEG030C-006 located at panel point 41. 1 Transverse crack was observed at time of inspection.

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions in the trial assembly yard. Locations and description of work are as followed:

5AW

1. Removal of side plate temporary attachment fixtures located on the counter weight side of segment.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer
